

California Regional Water Quality Control Board

Santa Ana Region

Internet Address: <http://www.swrcb.ca.gov/~rwqcb8>
3737 Main Street, Suite 500, Riverside, California 92501-3339
Phone (909) 782-4130 • FAX (909) 781-6288

April 2, 1999

Mr. Wayne D. Lee
Assistant Chief of Staff
Environment and Safety
Marine Corps Air Station El Toro
P. O. Box 95001
Santa Ana CA 92709-5001

**SUBJECT: CLOSURE OF UNDERGROUND STORAGE TANK (UST) CASE
REFUELING AND VEHICLE MAINTENANCE SHOP, USTS 672 & 672B
BUILDING 672, MARINE CORPS AIR STATION, EL TORO
CASE NO. 083003209T**

Dear Mr Lee:

This letter confirms the completion of the site investigation and remedial action which were needed to mitigate the releases from the underground storage tanks formerly located at the above described location. Enclosed is the Case Closure Summary for the referenced site for your records.

Two USTs were removed and discolored soil was observed on the southwest and northwest sidewalls of the excavation. Three hand-auger borings were drilled to 20 feet deep. Based on the analytical results of the soil sampling, additional petroleum contaminated soil (200 yds³) was removed down to approximately 18 feet below grade. Nine confirmation soil samples were collected. Soil samples were analyzed by EPA method 8015m for TPH and method 8020 for BTEX. One sample was analyzed using the Synthetic Precipitation Leaching Procedure (SPLP). The excavation was backfilled with clean stockpiled soil, imported fill sand and road base material and compacted.

Five soil borings were drilled in the vicinity of the excavation to determine the vertical extent of the petroleum hydrocarbons in the soil. Two soil borings were drilled to 40 feet deep and three were drilled to 80 feet deep. Soil samples were collected and submitted for analysis. Groundwater was not detected at 80 feet. The remaining petroleum concentrations do not appear to be a threat to groundwater.

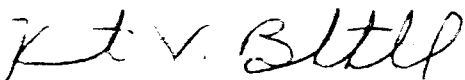
April 2, 1999

Based on the information in the March 12, 1998 Tank Removal and Site Closure Report for USTs 672 and 672B, and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground storage tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, California Code of Regulations, Division 3, Chapter 16, Section 2721 (e).

Please telephone Patricia Hannon at (909) 782-4498 if you have any questions regarding this matter.

Sincerely,



for Gerard J. Thibeault
Executive Officer

Attachment: Case Closure Summary

cc w/ attachment: Dept. of Toxic Substances Control - Tayseer Mahmoud
Kutak Rock, Attorneys - Gregory F. Hurley
Marine Corps Air Station El Toro - Capt. Jeff Matthews
Naval Facility Engineering Command, SWDIV - Lynn Hornecker
Orange County Hall of Administration - Courtney Wiercioch
Orange County Health Care Agency - Arghavan Rashidi-Fard
State Water Resources Control Board - John Adams
U. S. EPA, Region IX - Glenn Kistner



CASE CLOSURE SUMMARY

Leaking Underground Fuel Tank Program

I. Agency Information

DATE: March 31, 1999

AGENCY NAME	California Regional Water Quality Control Board - Santa Ana Region	STAFF	Patricia Hannon
ADDRESS	3737 Main St. Suite 500	TITLE	Associate Engineering Geologist
CITY/STATE/ ZIP	Riverside CA 92501-3339	PHONE	(909) 782-4498, main # 782-4130

II. Case Information

SITE NAME	Refueling and Vehicle Maintenance Shop, UST Site 672 and 672B			
LOCATION	Bldg 672, MCAS El Toro			
REGIONAL BOARD CASE #	083003209T	LOCAL AGENCY CASE #	NA	
RESPONSIBLE PARTIE	ADDRESS		PHONE NUMBER	
USMCAS El Toro contact: Wayne D. Lee, Assistant Chief of Staff Environment and Safety	P.O. Box 95000 Santa Ana, CA 92709-5000			
TANK NO.	SIZE IN GALLONS	CONTENTS	CLOSED IN PLACE/ REMOVED	DATE
672	100	diesel	removed	1/29/97
672B	1000	JP-5	removed	1/29/97

III. Release and Site Characterization Information

MONITORING WELLS INSTALLED?	no	NUMBER	NA	PROPER SCREEN INTERVAL?	NA
DEEPEST GW DEPTH	NA	SHALLOWEST GW DEPTH	83 ft. (well 08UGMW29 located ~300 ft. away)		
GROUNDWATER, MOST SENSITIVE CURRENT USE:		municipal		GW FLOW DIRECTION	northwest
DRINKING WATER WELL(S) AFFECTED?		no	AQUIFER NAME		Irvine Pressure
IS SURFACE WATER AFFECTED?		no	NEAREST/AFFECTED SW NAME		na
OFF-SITE BENEFICIAL USE IMPACTS (ADDRESSES/LOCATIONS):				none	
REPORT(S) ON FILE?	yes	WHERE IS/ARE REPORT(S) FILED?		R.W.Q.C.B. - Santa Ana Region	
TREATMENT AND DISPOSAL OF AFFECTED MATERIAL					
MATERIAL	AMOUNT	ACTION (TREATMENT, DISPOSAL)/ DESTINATION			DATE
TANK/PIPING	2 tanks,	Piping was abandoned in place. USTs were sent to the Defense Reutilization and Marketing Office for recycling.			1/29/97
FREE PRODUCT	none				
SOIL	247 yds ³	Treated at the Station's bioremediation treatment facility			1997
GROUNDWATER	none				

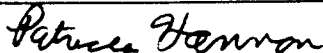
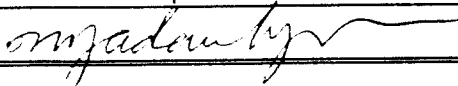
III. Release and Site Characterization Information (Continued)

Maximum Document Contaminant Concentration - Before and After Cleanup				
CONTAMINANT	SOIL (mg/kg)		WATER (µg/L)	
	INITIAL	FINAL	INITIAL	CURRENT
BENZENE	0.528	2.9 (29.5 ft.)	NA	NA
TOLUENE	3.3 (5ft)	0.270	NA	NA
ETHYLBENZENE	7.8 (10 ft.)	16 (29.5 ft.)	NA	NA
XYLENE	39 (10 ft.)	18 (29.5 ft.)	NA	NA
MTBE	na	na	NA	NA
TPH- JP-5	11000	6200	NA	NA
TPH - Diesel	26700 (10 ft.)	23000 (30 ft.)	NA	NA
TPH- Gasoline	2540 (5 ft.)	ND	NA	NA
TPH as motor oil	na	28	NA	NA
TPH (418.1)	18136 (5 ft.)	2770	NA	NA
COMMENTS REGARDING INVESTIGATION AND REMEDIATION				
<p>Two USTs were removed and discolored soil was observed on the southwest and northwest sidewalls of the excavation. Three hand-auger borings were drilled to 20 feet deep. Based on the analytical results of the soil sampling, additional petroleum contaminated soil (200 yds³) was removed down to approximately 18 feet below grade. Nine confirmation soil samples were collected. Soil samples were analyzed by EPA method 8015m for TPH and method 8020 for BTEX. One sample was analyzed using the Synthetic Precipitation Leaching Procedure (SPLP). The excavation was backfilled with clean stockpiled soil, imported fill sand and road base material and compacted.</p> <p>Five soil borings were drilled in the vicinity of the excavation to determine the vertical extent of the petroleum hydrocarbons in the soil. Two soil borings were drilled to 40 feet deep and three were drilled to 80 feet deep. Soil samples were collected and submitted for analysis. Groundwater was not detected at 80 feet.</p> <p>The remaining petroleum concentrations do not appear to be a threat to groundwater, which is greater than 80 feet from the surface. Based on the information provided in the March 12, 1998, <u>Tank Removal and Site Closure Report</u> for USTs 762 and 672B, this site is recommended for closure.</p>				

IV. Closure

DOES COMPLETED CORRECTIVE ACTION PROTECT <i>EXISTING</i> BENEFICIAL USES PER REGIONAL BOARD BASIN PLAN?			yes	
DOES COMPLETED CORRECTIVE ACTION PROTECT <i>POTENTIAL</i> BENEFICIAL USES PER THE REGIONAL BOARD BASIN PLAN?			yes	
MONITORING WELLS DECOMMISSIONED	NUMBER DECOMMISSIONED	na	NUMBER RETAINED	na
LIST ENFORCEMENT ACTIONS TAKEN		none		
LIST ENFORCEMENT ACTIONS RESCINDED		none		

V. Regional Board Representative Data

STAFF	Patricia Hannon	TITLE	Associate Engineering Geologist
SIGNATURE		DATE	3/31/99
SUPERVISOR	Michael Adackapara	TITLE	Senior WRC Engineer
SIGNATURE		DATE	4/2/99